

[001] This patent stems from a continuation-in-part patent application of U.S. patent application serial no. 09/181,724, filed November 29, 1998 entitled MATCHED-FILTER BASED HANDOFF METHOD AND APPARATUS, now U.S. patent no. 6,215,811, which is a continuation application of U.S. patent application serial no. 08/638,394, filed April 29, 1996, entitled MATCHED FILTER-BASED HANDOFF METHOD AND APPARATUS, now U.S. patent no. 5,864,578. The benefit of the earlier filing dates of the parent patent applications are claimed for common subject matter pursuant to 35 U.S.C. § 120.

[002] FIG. 24 is a block diagram of a receiver and transmitter for handoff for a base station or a remote station;

[003] FIG. 26 is a timing diagram for the handoff process using a higher symbol rate.

[004] The BS spread-spectrum transmitter and the BS spread-spectrum receiver are located at the base station 31. The BS spread-spectrum receiver includes an antenna 309 coupled to a circulator 310, a receiver radio frequency (RF) section 311, a local oscillator 313, a quadrature demodulator 312, and an analog-to-digital converter 314. The receiver RF section 311 is coupled between the circulator 310 and the quadrature demodulator 312. The quadrature demodulator is coupled to the local oscillator 313 and to the analog to digital converter 314.

The output of the analog-to-digital converter 314 is coupled to a programmable-matched filter 315.

[005] Similarly, the queued BS data are transmitted at a second BS data rate from the target-base station to the remote station. The queued BS data are transferred at a second BS data rate. The second BS data rate is greater than the first BS data rate. The second BS data rate and second RS data rate may be greater than the first BS data rate and the first RS data rate, respectively, due to sending packets at a higher data rate, or due to using parallel spread-spectrum channels, to effectively realize a faster data rate.

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